

***What Is Claimed Is:***

1. An isolated nucleic acid molecule consisting of a polynucleotide having a nucleotide sequence at least 90% identical to a sequence selected from the group consisting of:

- (a) a nucleotide sequence encoding a polypeptide comprising amino acids from 4 to 45 of SEQ ID NO:2;
- (b) a nucleotide sequence encoding a polypeptide comprising amino acids from 4 to 52 of SEQ ID NO:2;
- (c) a nucleotide sequence encoding a polypeptide comprising amino acids from 4 to 54 of SEQ ID NO:2; and
- (d) a nucleotide sequence complementary to any of the nucleotide sequences in (a), (b), or (c);

and optionally, a heterologous polynucleotide sequence.

2. An isolated polypeptide having an amino acid sequence at least 90% identical to a sequence selected from the group consisting of:

- (a) amino acids from 4 to 45 of SEQ ID NO:2;
- (b) amino acids from 4 to 52 of SEQ ID NO:2; and
- (c) amino acids from 4 to 54 of SEQ ID NO:2;

and optionally, a heterologous polypeptide sequence.

3. An isolated antibody that specifically binds to a polypeptide selected from the group consisting of:

- (a) a polypeptide consisting of amino acids 4 to 45 of SEQ ID NO:2;
- (b) a polypeptide consisting of amino acids from 4 to 52 of SEQ ID NO:2;
- (c) a polypeptide consisting of amino acids from 4 to 54 of SEQ ID NO:2;
- (d) a polypeptide consisting of amino acids from 9 to 13 of SEQ ID NO:2;
- (e) a polypeptide consisting of amino acids from 28 to 31 of SEQ ID NO:2;
- (f) a polypeptide consisting of amino acids from 49 to 52 of SEQ ID NO:2;

(g) a polypeptide consisting of amino acids from 105 to 111 of SEQ ID NO:2;

(h) a polypeptide consisting of amino acids from 133 to 142 of SEQ ID NO:2; and

(i) a polypeptide consisting of amino acids from 160 to 166 of SEQ ID NO:2.

4. The antibody of claim 3 that specifically binds a polypeptide consisting of amino acids 4 to 45 of SEQ ID NO:2 and a polypeptide consisting of amino acids 4 to 54 of SEQ ID NO:2.

5. A method of treating an immunodeficiency or condition associated with an immunodeficiency, comprising administering an effective amount of the polypeptide of claim 2 to a patient in need thereof.

6. A method of treating an immunodeficiency or condition associated with an immunodeficiency, comprising administering an effective amount of the antibody of claim 3, to a patient in need thereof.

7. A method of diagnosing an immunodeficiency or condition associated with an immunodeficiency, comprising contacting the polypeptide of claim 2 with a biological sample, and assaying for binding to said protein or antibody.

8. A method of diagnosing an immunodeficiency or condition associated with an immunodeficiency, comprising contacting the antibody of claim 3 with a biological sample, and assaying for binding to said protein or antibody.

9. A method of treating an autoimmune disease or condition associated with an autoimmune disease, comprising administering an effective amount of the polypeptide of claim 2, to a patient in need thereof.

10. A method of diagnosing an autoimmune disease or condition associated with an autoimmune disease, comprising contacting the polypeptide of claim 2 with a biological sample, and assaying for binding to said protein.

11. A method of treating an autoimmune disease or condition associated with an autoimmune disease comprising, administering an effective amount of the antibody of claim 3, to a patient in need thereof.

12. A method of diagnosing an autoimmune disease or condition associated with an autoimmune disease, comprising contacting the antibody of claim 3 with a biological sample, and assaying for binding to said antibody.

13. A method of increasing B cell proliferation, comprising administering an effective amount of the antibody of claim 3, to a patient in need thereof.

14. A method of increasing immunoglobulin production, comprising administering an effective amount of the antibody of claim 3, to a patient in need thereof.

15. A method of inhibiting B cell proliferation, comprising administering an effective amount of the polypeptide of claim 2 to a patient in need thereof.

16. A method of inhibiting B cell proliferation, comprising administering an effective amount of the antibody of claim 3 to a patient in need thereof.

17. A method of inhibiting immunoglobulin production, comprising administering an effective amount of the polypeptide of claim 2 to a patient in need thereof.

18. A method of inhibiting immunoglobulin production, comprising administering an effective amount of the antibody of claim 3, to a patient in need thereof.

19. A method of detecting Sjögren's disease comprising, contacting an isolated

polypeptide comprising the amino acid sequence of SEQ ID NO:2 with a biological sample and assaying for binding of neutrokin- $\alpha$  to said isolated polypeptide.

20. The method of claim 19, wherein said isolated polypeptide further comprises a heterologous amino acid sequence.

21. The method of claim 20, wherein said heterologous amino acid sequence is the amino acid sequence of a human immunoglobulin constant domain.

22. A method of detecting Sjögren's disease comprising, contacting an isolated polypeptide comprising amino acids 4 to 45 of SEQ ID NO:2 with a biological sample and assaying for binding of neutrokin- $\alpha$  to said isolated polypeptide.

23. The method of claim 22, wherein said isolated polypeptide further comprises a heterologous amino acid sequence.

24. The method of claim 23, wherein said heterologous amino acid sequence is the amino acid sequence of a human immunoglobulin constant domain.

25. A method of detecting Sjögren's disease comprising, contacting an isolated polypeptide comprising the amino acid sequence of SEQ ID NO:2 with a biological sample and assaying for binding of an antibody that binds specifically to said isolated polypeptide.

26. The method of claim 25, wherein said isolated polypeptide further comprises a heterologous amino acid sequence.

27. A method of detecting Sjögren's disease comprising, contacting an isolated polypeptide comprising an antigenic epitope of the amino acid sequence of SEQ ID NO:2 with a biological sample and assaying for binding of an antibody that binds specifically to said isolated polypeptide.

28. The method of claim 27, wherein said antigenic epitope comprises an amino acid sequence selected from the group consisting of:

- (a) amino acids 9 to 13 in SEQ ID NO:2;
- (b) amino acids 28 to 31 in SEQ ID NO:2;

- (c) amino acids 49 to 52 in SEQ ID NO:2;
- (d) amino acids 105 to 111 in SEQ ID NO:2;
- (e) amino acids 133 to 142 in SEQ ID NO:2; and
- (f) amino acids 160 to 166 in SEQ ID NO:2.

29. The method of claim 28, wherein said isolated polypeptide further comprises a heterologous amino acid sequence.